DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONSTRUCTION PERMIT

Permit No. 0073-AC023 Issue Date: Final 7/13/01
Revises Permit-to-Operate No. 9673-AA005

The Department of Environmental Conservation, under the authority of AS 46.03, 46.14, 6 AAC 50, 18 AAC 15, and 18 AAC 50, issues a Construction Permit to the Permittee, **BP Exploration (Alaska), Inc.**, for Phase II of the project at the **Milne Point Production Facility**.

Under AS 46.14.130(a), this permit allows the Permittee to modify the facility in accordance with terms and conditions of this permit. This permit contains terms and conditions necessary to ensure that the Permittee will build and operate the facility in accordance with 18 AAC 50.315(e).

______________________________ ______________________________

John F. Kuterbach, Manager Date
Air Permits Program

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List of Abbreviations Used in this Permit

AAC ....Alaska Administrative Code
ADEC...................Alaska Department of Environmental Conservation
AS.........................Alaska Statutes
ASTM...................American Society of Testing and Materials
BACT...................Best Available Control Technology
CEMS...................Continuous Emission Monitoring System
CFR......................Code of Federal Regulations
COMS ....Continuous Opacity Monitoring System
dscf.......................Dry standard cubic feet
EPA ....US Environmental Protection Agency
gr/dscf...................Grain per dry standard cubic feet (1 pound = 7000 grains)
HAPS....................Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
H_2S ....Hydrogen Sulfide
ID..........................Source Identification Number
MACT ....Maximum Achievable Control Technology
KPa.......................kiloPascals
Mlb ....thousand pounds
MMBtu.................Million British Thermal Units
NAAQS................National Ambient Air Quality Standards
NAICS..................North American Industry Classification System
NESHAPs.............Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 CFR 61]
NSPS....................Federal New Source Performance Standards [as defined in 40 CFR 60]
RM........................Reference Method
PEMS ....Predictive Emission Monitoring System
pph........................Pounds per hour
PPM......................Parts per million
PPMvd..................Parts per millions by volume, dry
PS ....Performance specification
PSD ....Prevention of Significant Deterioration
RA ....Relative Accuracy
SIC........................Standard Industrial Classification
SO_2 ....Sulfur dioxide
TPH ....Tons per hour
TPY ....Tons per year
VOC ....volatile organic compound [as defined in 18 AAC 50.990(103)]

Section 1. Identification

Names and Addresses

Permittee:	**BP Exploration (Alaska), Inc.** 900 East Benson Boulevard Anchorage, AK 99508
Facility:	The CFP, B-Pad, and E-Pad at the **Milne Point Production Facility**
Physical Address:	Milne Point Unit, North Slope, Alaska 70 deg 24 min N and 147 deg 54 min W
Owner:	BP Exploration (Alaska), Inc. 900 East Benson Boulevard Anchorage, AK 99519-6612
Operator:	BP Exploration (Alaska) Inc. 900 East Benson Boulevard Anchorage, AK 99508
Permittee's Responsible Official	Philip Aldis Production and Field Manager
Designated Agent:	CT Corporation System 801 West 10th Street, Suite 300 Juneau, AK 99801
Facility and Building Contact:	Operations Supervisor (907) 670-3331
SIC Code of the Facility:	1311
NAICS code of the Facility:	211111

[18 AAC 50.320(a)(1), 1/18/97]

Section 2. Permit Continuity

1. Except as revised or as rescinded herein, or as superseded by an Air Quality Permit issued under the authority of AS 46.14.170, the Permittee shall comply with terms and conditions of Air Quality Control Permit to Operate No. 9673-AA005 as amended through January 17, 1997.

2. If permit terms and conditions listed in this permit conflict with those of Air Quality Control Permit to Operate No. 9673-AA005, the Permittee shall comply with terms and conditions listed herein.

3. The terms and conditions, and Exhibits A through C of Air Quality Permit-to-Operate 9673-AA005 are rescinded and replaced with the terms and conditions of this permit.

4. Exhibit E, Permit Documentation of Permit to Operate No. 9673-AA005 is rescinded and replaced by Section 15 of this permit.

[18 AAC 50.340(i), 7/2/00]

Section 3. Source Inventory and Description

Regulated sources at the facility are shown below. Source descriptions and ratings are shown for identification purposes only.

[18 AAC 50.335(e), 1/18/97]

Table 1 – Source Inventory

Facility Tag	Location	Description	Nominal Capacity	Maximum Rate/Capacity	Fuel Type
Turbines					
PU-0701, PU-0801	CFP	GE LM-2500	29,500 hp	29,500 hp	Natural Gas and Diesel
Heaters					
H-5302A	CFP	Thermoflux	30.0 MMBtu/hr	35.0 MMBtu/hr	Natural Gas
H-5302B	CFP	Thermoflux	30.0 MMBtu/hr	35.0 MMBtu/hr	Natural Gas
H-4510A	E-pad	Latoka	14.4 MMBtu/hr	14.4 MMBtu/hr	Natural Gas
H-4510B	E-pad	Latoka	14.4 MMBtu/hr	14.4 MMBtu/hr	Natural Gas
H-5701A	CFP	Thermoflux	22.7 MMBtu/hr	29.0 MMBtu/hr	Natural Gas and Diesel
H-5701B	CFP	Thermoflux	22.7 MMBtu/hr	29.0 MMBtu/hr	Natural Gas and Diesel
H-2001A	B-pad	Thermoflux	13.1 MMBtu/hr	17.5 MMBtu/hr	Natural Gas
H-2001B	B-pad	Thermoflux	13.1 MMBtu/hr	17.5 MMBtu/hr	Natural Gas
Engines					
PU-0101A	CFP	Detroit Diesel	1,500 hp	1.5 MW	Diesel
PU-0101B	CFP	Detroit Diesel	1,500 hp	1.5 MW	Diesel
PU-0101C	CFP	Detroit Diesel	1,500 hp	1.5 MW	Diesel
PU-0110A	CFP	Cummins	187 hp	187 hp	Diesel
PU-0110B	CFP	Cummins	187 hp	187 hp	Diesel
PU-4703[1]	CFP	Cat 3304	120 hp	120 hp	Diesel
PU-2004	B-pad	Cummins	600 hp	0.448 MW	Diesel
Flare[2]					
(no ID)	CFP	National, Inc.	0.34 MMscf/day	83 MMscf/day	Natural Gas
NSPS Tanks					
T-6101A	CFP	Fixed Roof	147,000 gallons	147,000 gallons	Arctic Diesel
T-2002	B-pad	Fixed Roof	11,800gallons	11,800gallons	Methanol
Vents					
CFP Vents	CFP	Oil Reserve Tanks (T-6001, T-6101B)			
		Vent Header	Flotation Cells		
			Compressor Vents		
			TEG Reboiler		
			Drain Purge, Vent Purge Gas, Backwash Clarifier , Produced Water Surge Tank, Tank T-5853, and Sand Slurry Tank (nitrogen purge)		
		Other Tanks (T-2001, T-6102A, T-6102B)			

[1] PU-4703 is a non-road engine.
[2] Flare nominal capacity is for pilot and purge only.

Section 4. Source-Specific Requirements

Fuel Burning Equipment Standards – Turbines, Heaters, Engines and Flare

5. **Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Sources PU-0701, PU-0801, H-5302A & B, H-4510A & B, H-5701A & B, PU-0110A & B, and the flare reduce visibility through the exhaust effluent by greater than 20 percent for more than three minutes in any one hour.

[18 AAC 50.055(a)(1), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

5.1 Monitor, record and report according to Section 12.

[18 AAC 50.320(a)(2), 7/2/00]

6. **Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from Sources PU-0701, PU-0801, H-5302A & B, H-4510A & B, H-5701A & B, PU-0110A & B, and the flare to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours. This particulate matter limit applies on a per emission source basis.

[18 AAC 50.055(b)(1), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

6.1 Monitor, record, and report according to Section 12.

[18 AAC 50.320(a)(2), 7/2/00]

7. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from Sources PU-0701, PU-0801, H-5302A & B, H-4510A & B, H-5701A & B, PU-0110A & B, and the flare to exceed 500 PPM averaged over three hours.

[18 AAC 50.055(c), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

7.1 Comply with Conditions 18 and 19 that require the Permittee to use fuel oil with no greater than 0.3% sulfur by weight and natural gas with no greater than 100 PPMvd H_2S. Fuel that complies with the sulfur limits in Conditions 18 and 19 complies with Condition 7.

7.2 Monitor, record and report the fuel oil sulfur and the natural gas H_2S content as described under Conditions 11.2a, 11.2b, 18.1b, 18.1d, 18.1e, 19.2, 19.4, and 19.5 to demonstrate compliance with Condition 7.

[18 AAC 50.320(a)(2), 7/2/00]

Federal Emission Standards

This section contains federal NSPS requirements. Turbines PU-0701 and PU-0801 are subject to 40 CFR 60, Subparts A and GG. Heaters H-5302A & B are subject to 40 CFR 60, Subparts A and Dc. Tanks T-6101A and T-2002 are subject to Subpart Kb.

Conditions 8 and 9 apply to Turbines PU-0701 and PU-0801, and Heaters H-5302A & B.

8. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring device is inoperative.

[40 CFR 60.7(b), Subpart A, 7/1/99]

9. The Permittee shall not build, erect, install, or use any article, machine, equipment, or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.

[40 CFR 60.12, Subpart A, 7/1/99]
[18 AAC 50.045(c), 1/18/97]

Conditions 10 and 11 apply to Turbines PU-0701 and PU-0801.

10. The Permittee shall comply with the applicable provisions of 40 CFR 60, Subpart A as follows:

[40 CFR 60, Subpart A, 7/1/99]
[18 AAC 50.040(a)(2)(V), 1/18/97]

10.1 Except as provided in Condition 10.2, submit an excess emissions and monitoring system performance report containing the following information, for any time the water-to-fuel ratio falls below the ratio established in Condition 10.3c, and any time the fuel oil sulfur content or natural gas H_2S content exceeds the limits in Conditions 11.2a(iii) or 11.2b(ii), respectively. Submit the reports on a quarterly basis, postmarked no later than 30 days after the end of the last calendar quarter.

[40 CFR 60.7(c), Subpart A, 7/1/00]

a. The magnitude of excess emissions computed in accordance with Condition 10.6, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

[40 CFR 60.7(c)(1), Subpart A, 7/1/99]

b. Identification of each period of excess emissions that occurred during startup, shutdown, and malfunction of turbines PU-0701 and PU-0801; and the nature and cause of any malfunction, and the corrective action taken or preventative measures adopted.

[40 CFR 60.7(c)(2), Subpart A, 7/1/99]

c. The date and time identifying each period during which the flow meters were inoperative except for zero and span checks and the nature of any repairs or adjustments.

[40 CFR 60.7(c)(3), Subpart A, 7/1/99]

d. A statement indicating whether or not any excess emissions occurred or the flow meters were inoperative, repaired, or adjusted, at any time during the reporting period.

[40 CFR 60.7(c)(4), Subpart A, 7/1/99]

10.2 Submit a summary report form for excess emissions and monitoring system performance in the format shown in Figure 1 of 40 CFR 60.7 as follows:

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and flow meter downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, submit a summary report form instead of the excess emissions report described in Condition 10.1, otherwise

[40 CFR 60.7(d)(1), Subpart A, 7/1/99]

b. submit both the summary report form and the excess emission report in Condition 10.1.

[40 CFR 60.7(d)(2), Subpart A, 7/1/99]

10.3 No later than 180 days after installation of Direct Water Injection (DWI), and within 90 days after achieving the maximum production rate at which the affected facility will be operated while using DWI, conduct source tests for NO_X while using DWI for natural gas and fuel oil as follows:

[40 CFR 60.8, Subpart A, 7/1/99]

a. Use reference methods and procedures approved by the Department.

[40 CFR 60.335(b), Subpart GG, 7/1/99]

b. Use Equation 1 to compute the NO_X emission rate in volume percent:

Equation 1 $$NO_X = (NO_{Xo})(P_r / P_o)^{0.5} e^{19(H_o - 0.00633)} (288°K / T_a)^{1.53}$$

Where:

NO_X = emission rate of NO_X at 15 percent O_2 and ISO standard day conditions[3], volume percent

NO_{Xo} = observed NO_X concentration corrected to 15 percent O_2, PPM by volume

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg

P_o = observed combustor inlet absolute pressure at test, mm Hg

H_o = observed humidity of ambient air, g H_2O/g air

[3] ISO standard day conditions are defined as 288 °K (59 °F), 60% relative humidity and 101.3 kilopascals pressure in 40 CFR 60.331(g).

e = transcendental constant, 2.718

T_a = ambient temperature, °K

[40 CFR 60.335(c)(1), Subpart GG, 7/1/99]

Multiply the NO_X emission rate in volume percent by 10,000 to obtain the NO_X emission rate in PPM by volume.

c. Use the flow meters to measure the fuel consumption and water-to-fuel ratio necessary to comply with the NO_X standard in Condition 11.1 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO standard day conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2), Subpart GG, 7/1/99]

d. Use Method 20 to determine the NO_X and O_2 concentrations. The span values shall be 300 PPM of NO_X and 21 percent O_2. The NO_X emissions shall be determined at each of the load conditions specified in Condition 10.3c.

[40 CFR 60.335(c)(3), Subpart GG, 7/1/99]

10.4 Operate the flow meters required by Condition 11.1a continuously.

[40 CFR 60.13(e), Subpart A, 7/1/99]

10.5 Install the flow meters required by Condition 11.1a such that representative measurements of natural gas and fuel oil usage and mass ratio of water to fuel are obtained.

[40 CFR 60.13(f), Subpart A, 7/1/99]

10.6 Reduce data from the flow meters required by Condition 11.1a to 1-hour time periods (60-minute commencing on the hour) computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of flow meter breakdowns, repairs, calibrations checks, and zero and span adjustments shall not be included in the data averages computed under this condition. An arithmetic or integrated average of all data may be used. The data shall be in units of a ratio of water-to-fuel.

[40 CFR 60.13(h), Subpart A, 7/1/99]

11. The Permittee shall comply with the applicable provisions of 40 CFR 60, Subpart GG as follows:

[40 CFR 60, Subpart GG, 7/1/99]
[18 AAC 50.040(a)(2)(V), 1/18/97

11.1 Do not exceed the NSPS NO_X emission limit of 206.7 PPMvd, at 15 percent O_2 and ISO standard day conditions, [4] for each turbine.

[40 CFR 60.332(a)(2), Subpart GG, 7/1/99]

[4] ISO standard day conditions are defined as 288 °K (59 °F), 60% relative humidity and 101.3 kilopascals pressure in 40 CFR 60.331(g).

a. At the same time that Direct Water Injection (DWI) is installed on each turbine as required under Condition 25.1, install, calibrate, and operate fuel flow meters to measure natural gas and fuel oil usage and ratio of water to fuel. Maintain at the facility copies of documentation showing that the meters were calibrated to an accuracy of plus or minus five percent.

[40 CFR 60.334(a), Subpart GG, 7/1/99]

b. For the purpose of the reports required by Conditions 10.1 and 10.2, report as excess emissions any 1-hour time period that the average water-to-fuel ratio, as measured by the flow meters, falls below the water-to-fuel determined to show compliance with the NO_X standard in Condition 11.1 by the source test in Condition 10.3. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient temperature, and turbine load during the period of excess emissions.

[40 CFR 60.334(c)(1), Subpart GG, 7/1/99]

11.2 **Either** do not emit from the turbines exhaust that contains SO_2 in excess of 0.015 percent by volume at 15 percent O_2 on a dry basis, **or** do not burn in the turbines any fuel that contains in excess of 0.8 percent sulfur by weight.

[40 CFR 60.333(a) & (b), Subpart GG, 7/1/99]

a. Monitor turbine liquid fuel sulfur content as follows:

(i) Until an alternative monitoring plan in Condition 11.2a(ii) is approved by EPA, determine the sulfur content and nitrogen content of each shipment of liquid fuel. Use ASTM method D 2880-71 to determine the sulfur content and use ASTM method 3431-80 to determine the nitrogen content. The analysis may be performed by the Permittee or by any other qualified individual or organization.

[40 CFR 60.334(b)(1), Subpart GG, 7/1/99]
[40 CFR 60.335(a), (d), & (e), Subpart GG, 7/1/00]

(ii) Submit EPA approval of an alternative monitoring plan to the Department within 30 days of approval.

[40 CFR 60.334(b)(2), Subpart GG, 7/1/99]

(iii) For the purpose of the reports required by Conditions 10.1 and 10.2, report as excess emissions under NSPS anytime the liquid fuel sulfur content exceeds 0.8 percent sulfur by weight.

[40 CFR 60.334(c)(2), Subpart GG, 7/1/99]

b. Monitor turbine gaseous fuel sulfur content monthly using length-of-stain tube analysis as indicated in EPA approval letter dated January 18, 1990, and as follows:

[40 CFR 60.334(b)(2), Subpart GG, 7/1/99]
[EPA Approval letter, 1/18/90]

(i) Until a revised alternative monitoring plan in Condition 11.2b(ii) is approved by EPA, if the gaseous fuel sulfur content as measured in Condition 11.2b is greater than 50 PPM, analyze the H_2S content of natural gas daily using ASTM method D 1072-80, D 3031-81, D 4084-82, or D 3246-81. The analysis may be performed by the Permittee or by any other qualified individual or organization. Dilution of samples before analysis may used with the approval of the Department.

[40 CFR 60.334(b)(1), Subpart GG, 7/1/99]
[40 CFR 60.335(d), Subpart GG, 7/1/99]
[40 CFR 60.335(e), Subpart GG, 7/1/99]

(ii) Submit EPA approval of a revised alternative monitoring plan to the Department within 30 days of approval.

[40 CFR 60.334(b)(2), Subpart GG, 7/1/99]

(iii) For the purpose of the reports required by Conditions 10.1 and 10.2, report as excess emissions under NSPS anytime the H_2S content in the gaseous fuel exceeds 0.8 percent sulfur by weight (4389 PPM).

[40 CFR 60.334(c)(2), Subpart GG, 7/1/99]

Condition 12 applies to Heaters H-5302A & B.

12. The Permittee shall comply with the applicable provisions of 40 CFR 60, Subpart Dc as follows:

[40 CFR 60, Subpart Dc, 7/1/99]
[18 AAC 50.040(a)(2)(E), 1/18/97

12.1 Record and maintain records of the amount of natural gas combusted in H-5302A & B each day.

[40 CFR 60.48c(g), Subpart Dc, 7/1/99]

12.2 Comply with the recordkeeping requirements in Condition 8.

[40 CFR 60.48c(i), Subpart Dc, 7/1/99]
[40 CFR 60.7(f), Subpart A, 7/1/99]

Conditions 13 and 14 apply to Tanks T-6101A and T-2002.

13. The Permittee shall keep readily accessible records showing the dimension of the fuel storage tank vessel and an analysis showing the capacity of the storage vessel.

[18 AAC 50.040(a)(2)(M), 1/18/97]
[40 CFR 60.110b(c), 40 CFR 60.116b(b), Subpart Kb, 7/1/99]

14. The Permittee shall keep copies of the above-required records for the life of the fuel storage tank.

[18 AAC 50.320(a)(2), 7/2/00]
[40 CFR 60.110b(c), 40 CFR 60.116b(a), Subpart Kb, 7/1/99]

Section 5. Ambient Air Quality Protection Requirements

15. Flaring. For flaring events, calculate the monthly estimated emissions of PM, NO_X, SO_2, and CO using published emission factors, and include copies of the calculations with the operating report required under Condition 54.

[18 AAC 50.320(a)(2), 7/2/00]

16. Notification Requirements. The Permittee shall modify and operate the facility in accordance with the application and application supplements listed in Section 15 of this permit. Notwithstanding the regulations set forth in 18 AAC 50.300(h), the Permittee shall notify the Department, in accordance with the following condition, prior to:

16.1 installing a stationary source at the facility that is not listed in Table 1 of this permit;

16.2 making a change to a source listed in Table 1 that would cause it to deviate from the description of it provided in Table 1; or

16.3 making a change to the emission characteristics of a source listed in Table 1, including adding waste heat recovery, in a manner that would increase the ambient impact beyond that which the Department used when issuing this permit.

[18 AAC 50.320(a)(2), 7/2/00]

17. Notification Procedures. The Permittee shall use the following procedures when notifying the Department pursuant to the previous condition:

17.1 For changes described by 18 AAC 50.370(a), notify the Department in accordance with 18 AAC 50.370(b). The Permittee may implement the changes in accordance with 18 AAC 50.370(c).

17.2 For all other changes,

a. ask the Department if additional ambient impact assessment modeling is warranted for the proposed change;

b. within 60 days of receiving written Department notice that modeling is warranted, prepare and submit to the Department an ambient impact assessment for the specified air contaminant and averaging period; and

c. do not make the change until the Department concurs that the change will not interfere with attainment or maintenance of ambient air quality standards and maximum allowable ambient concentrations.

[40 CFR 50.320(a)(2), 7/1/99]

Owner Requested Limits

18. Fuel Oil Requirements: The Permittee shall burn fuel oil only as follows:

18.1 Burn fuel oil with no greater than 0.30 percent sulfur by weight in any of the fuel-burning equipment listed in Table 1. Monitor as follows:

[18 AAC 50.320(a)(2), 7/2/00]

a. For Turbines PU-0701 & PU-0801 (Subpart GG turbines) measure the sulfur content of the fuel oil as required in Condition 11.2a.

b. For all other fuel burning equipment listed in Table 1 except for Turbines PU-0701 and PU-0801, measure the sulfur content of the fuel oil in the sales tank at the Prudhoe Bay Topping Unit or Kuparuk Topping Unit according to ASTM D 396-92 every time the fuel supply changes.

[18 AAC 50.350(g), 6/21/98]

c. Submit a report in accordance with Condition 52 whenever a fuel oil sulfur content exceeds the limit in Condition 18.1.

[18 AAC 50.235(a)(2) & 18 AAC 50.240(c), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

d. Keep records of the sulfur content of each sample of fuel oil, and all test results and calculations.

[18 AAC 50.320(a)(2), 7/2/00]

e. Include copies of the records required under Condition 18.1d with the report required by Condition 54.

[18 AAC 50.320(a)(2), 7/2/00]

18.2 The Permittee shall burn no more than one million gallons of fuel oil per 12 consecutive months at the CFP, B-Pad, and E-Pad in all of the equipment listed in Table 1 and all other fuel burning equipment that may be present on the specified pads, except for fuel burned in motor vehicles and in insignificant sources as listed at 18 AAC 50.335(r), (s), and (t). Emission sources on rotary drill rigs shall not be excluded as insignificant sources.

[18 AAC 50.335(r), (s) & (t), 1/18/97]
[18 AAC 50.340(i), 1/18/97]

a. Measure the monthly total fuel oil delivered to the facility as follows,

(i) Use the fuel meters required by Condition 11.1a for Sources PU-0701 and PU-0801.

(ii) For other fuel burning sources, the fuel use may be estimated by calculations approved by the Department. Fuel meters, if used, must be calibrated and certified by the manufacturer to be accurate within 5 percent.

b. Record the total fuel oil burned in the previous 12 consecutive months.

[18 AAC 50.320(a)(2), 7/2/00]

c. Submit a report in accordance with Condition 52 for any violations of the fuel limit in Condition 18.2.

d. Include copies of the records required under Condition 18.2b with the report required by Condition 54 for each of the past 6 months.

[18 AAC 50.320(a)(2), 7/2/00]

19. Natural Gas Requirements. The Permittee shall burn natural gas with no greater than 100 PPM H_2S in any of the fuel burning equipment listed in Table 1.

[18 AAC 50.320(a)(2), 7/2/00]

19.1 For Turbines PU-0701 & PU-0801 (Subpart GG turbines) measure the H_2S content of the natural gas as required in Condition 11.2b.

19.2 For all other fuel burning equipment listed in Table 1 except for Turbines PU-0701 and PU-0801, measure the H_2S content of the natural gas monthly using length-of-stain tube analysis.

[18 AAC 50.320(a)(2), 7/2/00]

19.3 Submit a report in accordance with Condition 52 whenever the natural gas H_2S content exceeds the limit in Condition 19.

[18 AAC 50.235(a)(2) & 18 AAC 50.240(c), 1/18/97]
[18 AAC 50.350(a)(2), 7/2/00]

19.4 Keep records of the natural gas H_2S content, and all test results and calculations.

[18 AAC 50.320(a)(2), 7/2/00]

19.5 Include copies of the records required under Condition 19.4 with the report required by Condition 54.

[18 AAC 50.320(a)(2), 7/2/00]

20. The Permittee shall comply with the annual operating hour restrictions shown in Table 2.

[18 AAC 50.320(a)(2), 7/2/00]

Table 2 – Annual Operating Restrictions

Facility Tag	Restriction
H-5701A & B	Operate no more than 200 hours during any 12 consecutive months, combined, while firing fuel oil
PU-0101A, B, & C	Operate no more than 900 hours during any 12 consecutive months, combined
PU-0110A & B	Operate no more than 600 hours during any 12 consecutive months, combined
PU-2004	Operate no more than 300 hours during any 12 consecutive months
PU-4703	Operate no more than 1,344 hours per year while at CFP, B-pad, and E-pad

20.1 Maintain a daily log that includes the operating time in hours for each source listed in Table 2.

20.2 Each month, calculate the monthly operating time in hours for each source listed in Table 2 and summarize the operating time in hours for the previous twelve months.

20.3 Submit a report in accordance with Condition 52 whenever the 12-month operating hours summarized under Condition 20.2 exceed the restrictions listed in Table 2.

20.4 Include copies of the records required by Condition 20.2 with the report required by Condition 54.

21. The Permittee shall comply with the daily operating scenarios shown in Table 3.

[18 AAC 50.320(a)(2), 7/2/00]

Table 3 – Daily Operating Restrictions [5]

Facility Tag	Scenario 1		Scenario 2		Scenario 3	
	Fuel	**Restriction**	**Fuel**	**Restriction**	**Fuel**	**Restriction**
PU-0701	Natural Gas	Unrestricted	Natural Gas/Diesel	900 lb SO_2/day	Natural Gas/Diesel	900 lb SO_2/day
PU-0801	Natural Gas	Unrestricted				
H-5701A	Natural Gas	Unrestricted	Diesel	Unrestricted	Diesel	Combined total of 24 hr/day
H-5701B	Natural Gas	Unrestricted	Diesel	Unrestricted	Diesel	
PU-0101A	Diesel	Combined total of 76.5 MW-hr/day	Diesel	Combined total of 15.0 MW-hr/day	Diesel	Combined total of 72.0 MW-hr/day
PU-0101B	Diesel		Diesel		Diesel	
PU-0101C	Diesel		Diesel		Diesel	
PU-0110A	Diesel	Combined total of 12 hr/day	Diesel	Combined total of 16 hr/day	Diesel	Combined total of 12 hr/day
PU-0110B	Diesel		Diesel		Diesel	
PU-2004	Diesel	9.8 MW-hr/day	Diesel	9.8 MW-hr/day	Diesel	9.8 MW-hr/day

21.1 Operate under scenario 1 except as provided in Condition 21.2.

21.2 Operate under scenarios 2 or 3 only if natural gas is unavailable. Prorate operation of each scenario used during each day.

21.3 Record the following:

a. For each source listed in Table 3, maintain a daily log that includes the operating scenario and compliance data.

b. Each month, summarize the daily operating scenarios for the month.

21.4 Submit a report in accordance with Condition 52 for any violations of the daily operating scenarios in Table 3.

[5] Equipment not listed in Table 3 is not subject to any daily operating restrictions.

21.5 Include copies of the records required by Condition 21.3b with the report required by Condition 54.

BACT and PSD Avoidance Limits from Previous Permits

22. The Permittee shall comply with the following CO emission limits:

22.1 Heaters H-5302A & B, H-4510A & B, H-5701A & B, and H-2001A & B shall emit no more than 0.2 lb/MMBtu of CO when firing natural gas.

[18 AAC 50.320(a)(2), 7/2/00]

22.2 Monitor, record and report by following established preventative maintenance guidelines, and maintaining records of maintenance completed. Retain maintenance records for five years, and submit records to Department upon request.

[18 AAC 50.320(a)(2), 7/2/00]

23. The Permittee shall comply with the following NO_X emission limits:

23.1 Turbines PU-0701 and PU-0801 shall emit no more than 184 PPMvd of NO_X, each, corrected to 15 percent O_2. Comply as follows:

[18 AAC 50.320(a)(2), 7/2/00]

a. If not using Direct Water Injection (DWI),

(i) operate at no greater than 21,371 kW (generator output) each when using natural gas.

(ii) operate at no greater than 7,771 kW (generator output) each when using fuel oil.

b. If using DWI, load is restricted to maximum load at which compliance was demonstrated for each fuel during any source test required under Condition 10.3, 38.2b, 38.2d, 39.1a(ii), or 39.1a(iv).

c. Conduct source tests as required in Condition 38.2 to demonstrate compliance with the NO_X BACT limit in Condition 23.1.

d. Record the load in kW for Turbines PU-0701 and PU-0801 for each hour of the day and whether DWI was used.

e. Submit a report in accordance with Condition 52 any violations of the operating load limits in Condition 23.1a, and any violations of the emission rate limit in Condition 23.1.

f. Include copies of the records required by Condition 23.1d with the report required by Condition 54.

[18 AAC 50.320(a)(2), 7/2/00]

23.2 Heaters H-5302A & B shall emit no more than 0.05 lb of NO_X/MMBtu, each; H-4510A & B shall emit no more than 0.08 lb of NO_X/MMBtu, each; and H-5701A & B shall emit no more than 0.08 lb of NO_X/MMBtu, each, while firing natural gas and 11.3 lb of NO_X/hr (based on HHV) while firing fuel oil. Comply as follows:

[18 AAC 50.320(a)(2), 7/2/00]

a. No later than 180 days after permit issuance, and upon Department request, conduct source tests for NO_X to ascertain compliance with the emission limit in Condition 23.2 for H-5701A, when firing natural gas. Conduct source tests in accordance with the requirements in Section 9. Determine the NO_X emission rate for the heater using exhaust properties determined by both Method 19 and exhaust gas measurements in Section 9. Compliance with the NO_X emission rate will be determined using Method 19.

b. Submit a report in accordance with Condition 52 any exceedance of the limits in Condition 23.2.

c. Submit a copy of the source test results to the Department within 45 days of test, as required by Condition 47.

[18 AAC 50.320(a)(2), 7/2/00]

23.3 Heaters H-2001A & B shall emit no more than 0.08 lb of NO_X/MMBtu at any time. Comply as follows:

[18 AAC 50.320(a)(2), 7/2/00]

a. Do not operate Heaters H-2001A or H-2001B on fuel oil at any time.

b. Replace both heaters with Low NO_X burner technology no later than 180 days after permit issuance.

c. No later than 180 days after startup for low NO_X burner technology, and upon Department request, conduct source tests for NO_X to ascertain compliance with the emission limits in Condition 23.3 for H-2001A. Conduct source tests in accordance with the requirements in Section 9. Determine the NO_X emission rate for the heaters using exhaust properties determined by both Method 19 and exhaust gas measurements in Section 9. Compliance with the NO_X emission limits will be determined using Method 19.

d. Submit a report in accordance with Condition 52 any exceedance of the limit specified in Condition 23.3.

e. Submit a copy of the source test results to the Department within 45 days of test, as required by Condition 39.3.

[18 AAC 50.320(a)(2), 7/2/00]

24. The Permittee shall comply with VOC BACT limits for vents as follows:

[18 AAC 50.320(a)(2), 7/2/00]

24.1 Provide a Gas Blanketing and back pressure relief valve for the oil reserve tanks T-6001 and T-6101B.

24.2 No later than 60 days after permit issuance, do not vent gas to atmosphere from the produced water surge tank. Isolate the pressure control valve.

24.3 Report to the Department within 30 days after the pressure control valve has been isolated.

[18 AAC 50.320(a)(2), 7/2/00]

Section 6. Prevention of Significant Deterioration Avoidance for NO_X, SO_2 and PM

Owner Requested Limits

25. Nitrogen Dioxide Requirements. The Permittee shall avoid classification as a PSD modification under 18 AAC 50.300(h)(3)(B)(ii) for NO_X by emitting no more than 625.00 TPY of NO_X from Turbines PU-0701 and PU-0801, combined, as follows:

[AS 46.14.140(b), 6/25/93]
[18 AAC 50.305(a)(4), 7/2/00]

25.1 Limit operating load and/or use Direct Water Injection (DWI) technology on each of the turbines. Notify the Department within two business days of DWI initial operation.

25.2 Except as provided for in Condition 25.3, no later than the fifteenth day of each calendar month, calculate the NO_X emissions in tons/month for the previous calendar month using Equation 2, and as follows:

Equation 2

$$NO_X \ emissions\left(\frac{tons}{mo}\right) = ER\left(\frac{lb}{hr}\right)\times\left(\frac{hr}{mo}\right)\times\left(\frac{ton}{2000\,lb}\right)$$

Where,

ER = Average hourly NO_X emission rate for previous month in pph from Condition 37

a. if Permit No. 0073-AC023 has been in effect for 12 months or more, calculate and record the 12-month rolling total NO_X emissions for both turbines by adding the total NO_X emissions for the prior calendar month to the monthly totals for the previous months, or

b. if Permit No. 0073-AC023 has been in effect for less than 12 months, calculate and record the total NO_X emissions for both turbines since permit issuance by adding the total NO_X emissions for the prior calendar month to the monthly totals for each month since issue date of Permit No. 0073-AC023.

25.3 If monitoring NO_X emissions according to Condition 37.1, for operations prior to approval of a best-fit correlation under Condition 38.5, by the fifteenth day of the first month after the approval of the correlation, calculate the NO_X emissions in tons/month for each calendar month since the issue date of Permit No. 0073-AC023 using Equation 2. Prorate emissions for the partial months.

25.4 Submit a report in accordance with Condition 52 if the total NO_X emissions calculated under Condition 25.2 or 25.3 exceed the emission limit in Condition 25.

25.5 Attach a summary of the total NO_X emissions calculated under Conditions 25.2 or 25.3 to the report required by Condition 54.

[18 AAC 50.320(a)(2), 7/2/00]

26. Sulfur Dioxide Requirements. Comply with the fuel sulfur limits, monitoring, recordkeeping and reporting set out in Condition 18 and 19.

[AS 46.14.140(b), 6/25/93]
[18 AAC 50.305(a)(4), 7/2/00]

27. Particulate Matter Requirements. The Permittee shall avoid classification as a PSD modification under 18 AAC 50.300(h)(3)(B)(v) for PM-10 by emitting no more than 28.00 TPY of PM-10 from Turbines PU-0701 and PU-0801, combined. Calculate 12-month PM-10 emissions from PU-0701 and PU-0801 as follows:

[AS 46.14.140(b), 6/25/93]
[18 AAC 50.305(a)(4), 7/2/00]

27.1 Calculate PM-10 emissions from natural gas usage by

a. except as provided in Condition 27.1b, calculating and recording the total amount of natural gas in MMscf used in both turbines for each month using the readings taken under Condition 11.1a;

b. for any time period during which the unit is operational and the fuel consumption records are missing or incorrect, estimating fuel consumption based on the design firing rate of the unit.

c. adding the totals determined under Condition 27.1a or 27.1b to the monthly totals for the previous 11 months to get 12 month natural gas usage in MMscf/yr, and

d. calculating the 12 month PM-10 emissions from natural gas using Equation 3

Equation 3 $$E_{NG} = (EF)(F)(0.0005 tons / lb)$$

Where:

E_{NG} = PM-10 emissions from natural gas in TPY

EF = PM-10 emission factor in lb/MMscf as described in Condition 27.1e

F = 12-month natural gas usage in MMscf/yr as calculated in Condition 27.1c

e. Determine the emission factor to be used in Condition 27.1d as follows

(i) Until a source test is required by Condition 27.3, use an initial emission factor of 6.93 lb/MMscf,

(ii) Once a source test required by Condition 27.3 has been conducted, use the PM emission factor for natural gas in lb/MMscf from the source test.

27.2 Calculate PM-10 emissions from fuel oil usage by

a. except as provided in Condition 27.2b, calculating and recording the total amount of fuel oil in gallons used in both turbines for each month using the readings taken under Condition 11.1a;

b. for any time period during which the unit is operational and the fuel consumption records are missing or incorrect, estimating fuel consumption based on the design firing rate of the unit.

c. adding the totals determined under Condition 27.2a or 27.2b to the monthly totals for the previous 11 months to get 12 month fuel oil usage in gal/yr, and

d. calculating the 12 month PM-10 emissions from fuel oil using Equation 4

Equation 4 $E_D = (EF)(F)(HV)(0.0005 tons / lb)$

Where:

E_D = PM-10 emissions from diesel in TPY

EF = PM-10 emission factor in lb/MMBtu, based on HHV, as described in Condition 27.2e

F = 12-month fuel oil usage in gal/yr as calculated in Condition 27.2b

HV = High Heating value (HHV) of diesel fuel = 141 MBtu/gal (BP, 1999 page G-6)

e. Determine the emission factor to be used in Condition 27.2d as follows

(i) Until a source test is required by Condition 27.3, use an initial emission factor of 0.012 lb/MMBtu (EPA, 2000 Table 3.1-2a).

(ii) Once a source test required by Condition 27.3 has been conducted, use the PM emission factor for diesel fuel in lb/MMBtu, based on HHV, from the source test.

27.3 No later than the fifteenth day of each calendar month, calculate and record the 12-month total PM-10 emissions for the turbines by adding emissions from Conditions 27.1d and 27.2d, and

a. The first time that the 12-month total from Condition 27.3 exceeds 26.00 tons, determine PM-10 emission factors for the turbines, in lb/MMscf for natural gas firing and in lb/MMBtu (based on HHV), for fuel oil-firing, with and without DWI, by conducting source tests in accordance with Condition 45. Consider the end of the month that resulted in the 12-month total exceeding 26.00 tons to be the date of the Department's request for a source test under Condition 45.

b. If the 12-month total from Condition 27.3 exceeds 28.00 tons, notify the Department as required in Condition 52.

27.4 Attach a summary of the 12-month PM-10 emission totals to the report required by Condition 54. Keep records documenting the emissions calculations. If the duration of the emission unit's operations has not yet approached 12 months, list the cumulative operation of the unit as a substitute for compliance with the 12-month rolling total limit.

[18 AAC 50.320(a)(2), 1/18/97]

Section 7. Best Available Control Technology (BACT) for CO

This section contains CO BACT requirements for Sources PU-0701, PU-0801, and H-5701A & B (diesel).

28. The Permittee shall emit no more than 70 pph of CO from Turbines PU-0701 and PU-0801, each, as follows:

[18 AAC 50.310(d)(3), 6/21/98]

28.1 Monitor the CO emission rate in pph as indicated in Condition 37.

28.2 Submit a report in accordance with Condition 52 any violations of the CO hourly BACT limit in Condition 28.

[18 AAC 350(g)(5)(A), 18 AAC 50.320(a)(2), 7/2/00]

29. The Permittee shall emit no more than 94.4 TPY of CO from Turbines PU-0701 and PU-0801, each, as follows:

[18 AAC 50.310(d)(3), 6/21/98]

29.1 Except as provided for in Condition 29.2, no later than the fifteenth day of each calendar month, calculate CO emissions in tons/month for the previous calendar month using Equation 5, and

Equation 5 $$CO\ emissions\left(\frac{tons}{mo}\right) = ER\left(\frac{lb}{hr}\right)\times\left(\frac{hr}{mo}\right)\times\left(\frac{ton}{2000\,lb}\right)$$

Where,

ER = Average hourly CO emission rate for previous month in pph from Condition 37

a. If the permit has been in effect for 12 months or more, calculate and record the 12-month rolling total CO emissions for both turbines by adding the total CO emissions for the prior calendar month to the monthly totals for the previous months, or

b. If the permit has been in effect for less than 12 months, calculate and record the total CO emissions for both turbines since permit issuance by adding the total CO emissions for the prior calendar month to the monthly totals for each month since issue date of permit no. 0073-AC023.

29.2 If monitoring CO emissions according to Condition 37.1, for operations prior to approval of a best-fit correlation under Condition 38.5, by the fifteenth day of the first month after the approval of the correlation, calculate the CO emissions in tons/month for each calendar month since the time of permit issuance using Equation 5. Prorate emissions for the partial months.

29.3 Submit a report in accordance with Condition 52 if the total CO emissions calculated under Condition 29.1 or 29.2 exceed the emission limit in Condition 29.

29.4 Attach a summary of the total CO emissions calculated under Conditions 29.1 or 29.2 to the report required by Condition 54.

[18 AAC.320(a)(2), 7/2/00]

30. The Permittee shall emit no more than 5 lb of CO/1,000 gallons of fuel combusted from each of H-5701A & B when firing with fuel oil. Follow established preventative maintenance guidelines,and maintain records of maintenance completed. Retain maintenance records for five years, and submit records to Department upon request.

[18 AAC 50.310(d)(3), 6/21/98]

Section 8. Generally Applicable Requirements

31. Good Air Pollution Control Practice. The Permittee shall install, maintain and operate, in accordance with BPXA or manufacturer's procedures, fuel burning equipment, process equipment, emission control devices, testing equipment and monitoring equipment to provide optimum control of air contaminant emissions during all operating periods. This condition is not federally enforceable, except for Turbines PU-0701 & PU-0801, and Heaters H-5302A & B.

[18 AAC 50.030, 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]
[40 CFR 60.11(d), 7/1/99[6]]

32. Dilution. The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a) 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

33. Modification. The Permittee shall not construct, operate, or modify a source that will result in a violation of the applicable emission standards or that will interfere with the attainment or maintenance of the ambient air quality standards or maximum allowable ambient concentrations.

[18 AAC 50.045(c), 1/18/97]

33.1 Obtain all permits or permit revisions required for construction, modification, or operation under 18 AAC 50 and AS 46.14.

[18 AAC 50.320(a)(2), 7/2/00]

33.2 Comply with the conditions of all permits obtained under 18 AAC 50 and AS 46.14.

[18 AAC 50.320(a)(2), 7/2/00]

34. Stack Injection. The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the department.

[18 AAC 50.055(g) and 18 AAC 50.310(m), 1/18/97]

35. Air Pollution Prohibited. The Permittee shall not cause any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 5/26/72}
{18 AAC 50.040(e), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

35.1 Within 24 hours of receiving a complaint that is attributable to emissions from the facility, investigate the complaint and initiate corrective actions to alleviate or eliminate the cause of the complaint.

[6] 40 CFR 60.11(d) applies only to Turbines PU-0701 & 0801, and Heaters H-5302A & B.

35.2 Keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for complaints attributable to emissions from the facility. Upon request of the Department, submit copies of the records.

[18 AAC 50.235(a), 1/18/97]

36. HAP Reconstruction. Before replacing components of a major source of HAPS as that term is defined in 40 CFR 63.2, or a source that would become a major source as a result of replacement, if the cost of replacement exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source, the Permittee shall obtain written approval from the Department

36.1 under 40 CFR 63.5(b)(3), (d), and (e), if the source is subject to an emission standard of 40 CFR 63, or

36.2 in a Notice of MACT Approval under 40 CFR 63.43(f) – (h), if the source is subject to 40 CFR 63.43(a).

[18 AAC 50.345(b), 6/21/98]
[18 AAC 50.320(a)(2), 7/2/00]

Section 9. General Source Testing and Monitoring Requirements

37. Turbine NO_X and CO Monitoring Requirements. The Permittee shall monitor process parameters hourly and calculate the NO_X and CO emission rates in pph no less than once per month for sources PU-0701 and PU-0801 in accordance with Conditions 37.1 or 37.2 as follows:

37.1 Use the best-fit correlation most recently approved by the Department under Condition 38.5, and

a. Revise a correlation based on results of any annual relative accuracy (RA) source test required by Condition 39. Submit the revisions for Department approval in accordance with Condition 38.5.

b. If two consecutive RA tests performed under Condition 39 for the department approved correlation exceed the limits in Conditions 37.1b(i) or 37.1b(ii) install and use a CEMs as described in Condition 40, no later than 120 days after submitting the report for the second failing test.

(i) twenty percent when the RM value is used in the denominator of the RA equation in 40 CFR 60, Appendix B, Performance Specification 2, Section 12, Equation 2-6 (average emissions during test are greater than 50 percent of the emission standard) or

[65 FR_61744, 10/17/00]

(ii) ten percent when the applicable emission standard is used in the denominator of the RA equation in 40 CFR 60, Appendix B, Performance Specification 2, Section 12, Equation 2-6 (average emissions during test are less than 50 percent of the emission standard).

[65 FR_61744, 10/17/00]

37.2 Use a CEMS as described in Condition 40.

38. Best-Fit Correlation Method. The Permittee shall develop best-fit correlations between NO_X emission rates from source tests and turbine process parameters and between CO emission rates from source tests and turbine process parameters, as follows:

38.1 Notify the Department of intention to develop a best-fit correlation for emission monitoring, and submit a source test plan to the Department in accordance with Condition 45, including

a. identification of the proposed process parameters for which the Permittee elects to measure a parametric monitoring correlation, and

b. a description of the monitoring methodology accuracy and precision of methodology and sampling rates of each parameter.

38.2 Conduct **three** sets[7] of initial Reference Method (RM) source tests as described in Condition 43 at each of **three** loads (high, medium, and low), on **both** turbines, for each of the **four** operating scenarios listed below, for NO_X and CO.

a. Natural gas, without DWI, within 90 days of permit issuance,

b. Natural gas, with DWI, according to the schedule in Condition 10.3,

c. Fuel oil, without DWI, within 90 days of permit issuance, and

d. Fuel oil with DWI, according to the schedule in Condition 10.3.

38.3 During the RM source tests required under Condition 38.2, collect and record the process parameters identified in Condition 38.1a for the purpose of developing parametric correlations for NO_X and CO emission rates for both natural gas and fuel oil.

38.4 Using the RM test results from Condition 38.2, develop best-fit correlations for emission rates based on turbine process parameters as follows: (The correlations may also be based on SSPOWGEN or other vendor data as well as the RM source tests.)

a. NO_X/natural gas, with and without DWI;

b. NO_X/fuel oil, with and without DWI;

c. CO/natural gas, with and without DWI; and

d. CO/fuel oil, with and without DWI.

38.5 Within 45 days after completing the RM tests, submit to the Department for written approval a report that describes the best-fit correlation development or revision, including the methodology, assumptions, analysis (with sample calculations), supporting notes, and a list of all process parameters used in the correlations with an analysis of their statistical relevance for the correlation (i.e. an r^2 analysis of curve fit).

38.6 Develop QA procedures for the process parameters used in the correlation developed under Condition 38.5.

38.7 Include copies of the QA procedures with the report required by Condition 54.

39. **Relative Accuracy (RA) Test Procedures for NO_X and CO.** Except as provided in Condition 39.3, the Permittee shall determine the RA of all correlations approved under Condition 38.5 annually as follows:

[7] One set = one run, so three runs are required at high load, three at medium and three at low.

39.1 No more than 12 months after the previous series of RM tests, conduct RM tests for NO_X and CO as follows:

a. Conduct a minimum of **three** sets[8] RM source tests as described in Condition 43 at each of **three** loads (high, medium, and low), on **one** turbine (in even years on PU-0701 and in odd years on PU-0801), for each of the **four** following operating scenarios:

(i) Natural gas, without DWI,

(ii) Natural gas, with DWI,

(iii) Fuel oil, without DWI, and

(iv) Fuel oil, with DWI.

b. Record each statistically relevant process parameter during each RM source test no less than once every 15 minutes. Mark the beginning and end of each RM source test on the output record.

c. Record the NO_X and CO emission concentrations in ppm for each RM source test period ("RM value") for each of the operating scenarios in Condition 39.1a.

d. Determine the integrated average NO_X and CO emission rates in pph for each RM test period using the best fit correlations approved by the Department under Condition 38.5. Convert the NO_X and CO emission rates in pph to concentration in ppm using the procedures in 40 CFR 60 Appendix A, Method 19 using fuel- and site-specific F-factors ("correlation value"). If a net heating value F-factor is used, then use a net heating value fuel consumption rate.

39.2 Calculate the relative accuracy of a correlation compared to a RM test as follows:

a. If the RM has an instrumental or integrated non-instrumental sampling technique, make a direct comparison of the RM value and the correlation value.

b. If the RM has a grab sampling technique, first average the results from all grab samples taken during the test run, and then compare this average value against the value obtained from the correlation during the run.

c. Using the procedures in 40 CFR 60, Appendix B, Performance Specification 2, Section 12 and summarizing the results on a data sheet similar to that shown in Section 18 calculate the

[8] One set = one run, so three runs are required at high load, three at medium and three at low.

(i) arithmetic mean of the difference between the "RM value" and the "correlation value",

(ii) standard deviation,

(iii) confidence coefficient, and

(iv) relative accuracy.

39.3 If five consecutive annual RA verifications of any correlation are less than the limits in Condition 37.1b the Permittee may double the duration between tests, with the Department's concurrence.

39.4 Attach copies of the results of all RM tests (including any rejected test results) conducted under Condition 39.1a, the report required under Condition 54.

40. CEMS. Install, calibrate, and conduct applicable continuous monitoring system performance tests listed in 40 CFR 60, Appendix B, effective July 1, 1999, and certify test results; operate; and maintain air contaminant emissions and process monitoring equipment on the sources as described herein. Submit monitoring equipment siting, operation, maintenance plans, and procedures for approval by the Department.

40.1 Comply with each applicable monitoring system requirement, as listed in 40 CFR 60.13, 60.19, Appendix A (Method 19), and Appendix F, 65 FR 61744 (Performance Specification 2), and the *EPA Quality Assurance Handbook for Air Pollution Measurements Systems*, EPA/600 R-94/038b.

[40 CFR 60, Subpart A, and Appendix A, 7/1/99]
[65 FR_61744, 10/17/00]

40.2 Attach to the report required by Condition 54

a. A copy of each quarterly report continuous emission monitoring system data assessment report for Quality Assurance Procedures conducted in accordance with 40 CFR 60, Appendix F, and

[40 CFR 60, Appendix F, 7/1/99]

b. A copy of each quarterly monitoring systems performance report in accordance with 40 CFR 60.7.

[40 CFR 60, Subpart A, 7/1/99]

41. Requested Source Tests. In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 18 AAC 50.345(a)(10), 1/18/97]

42. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

42.1 at a point or points that characterize the actual discharge into the ambient air; and

42.2 at the maximum rated burning or operating capacity of the source or another rate determined by the department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b) & 18 AAC 50.350(g), 1/18/97]

43. Reference Test Methods. The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

[18 AAC 50.320(a)(2), 7/2/00]

43.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 CFR 60.

[18 AAC 50.220(c), 1/18/97
[40 CFR 60, 7/1/99]

43.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 CFR 61.

[18 AAC 50.220(c), 1/18/97]
[40 CFR 61, 12/19/96]

43.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 CFR 63.

[18 AAC 50.220(c), 1/18/97]
[40 CFR 63, 7/1/99]

43.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Section 13 of this permit. Visibility source testing is exempt from the requirements listed in Conditions 45 through 47.

[18 AAC 50.220(c), 1/18/97

43.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 CFR 60, Appendix A.

[18 AAC 50.220(c) & 18 AAC 50.040, 1/18/97]
[40 CFR 60, Appendix A, 7/1/99]

43.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M.

[18 AAC 50.220(c), 1/18/97]
[40 CFR 51, Appendix M, 7/1/99]

43.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the department in accordance with Method 301 in Appendix A to 40 CFR 63.

[18 AAC 50.220(c), 1/18/97]

[40 CFR 63, Appendix A, 7/1/99]

44. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.990(88) & 18 AAC 50.220(c)(3), 1/18/97]

45. Test Plans. Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the source will operate during the test and how the Permittee will document this operation. A complete plan must be submitted within 60 days of receiving a request under Condition 41 and at least 30 days before the scheduled date of any tests.

[18 AAC 50.345(a)(10) & 18 AAC 50.350(b)(3), 1/18/97]

46. Test Notification. At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and time the source test will begin.

[18 AAC 50.345(a)(10), 1/18/97]

47. Test Reports. Within 45 days after completing a source test, the Permittee shall submit two copies of the results, to the extent practical, in the format set out in the *Source Test Report Outline* of Volume III, Section IV.3 of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8). The Permittee shall certify the results as set out in Condition 48 of this permit.

[18 AAC 50.345(a)(10), 1/18/97]

Section 10. General Recordkeeping, Reporting, and Compliance Certification Requirements

48. Certification. The Permittee

48.1 shall certify all reports, compliance certifications, or other documents submitted to the Department under this permit as required by 18 AAC 50.205, and

[18 AAC 50.345(a)(9), 1/18/97]

48.2 may certify the excess emission reports submitted pursuant to Condition 52 with the operating report required by Condition 54 of this permit, for the same six month period. All other reports must be certified upon submittal.

[18 AAC 50.205, 18 AAC 50.345(a)(9), & 18 AAC 50.320(a)(2), 1/18/97]

49. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.320(a)(2), 1/18/97]

50. Information Requests. The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by this permit. The Department, in its discretion, will require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200, 18 AAC 50.345(a)(8), & 18 AAC 50.320(a)(2), 1/18/97]

51. Recordkeeping Requirements. Except for the records required by Condition 13, the Permittee shall keep all records required by this permit for at least five years after the date of collection, including

51.1 Copies of all reports and certifications submitted pursuant to this Section of this permit.

51.2 Records of all monitoring and measurements required by this permit, and information about the monitoring and measurements, including

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

b. sampling dates and times of sampling and measurements;

c. the operating conditions that existed at the time of sampling or measurement;

d. the date analyses were performed;

e. the location where samples were taken;

f. the company or entity that performed the sampling and analyses;

g. the analytical techniques or methods used in the analyses; and

h. the results of the analyses.

[18 AAC 50.320(a)(2), 7/2/00]
[40 CFR 60.7(e) and (f), Subpart A, 7/1/99][9]
[40 CFR 60.48c(i), Subpart Dc, 7/1/99][10]

52. Excess Emission and Permit Deviation Reports. The Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit or that present a potential threat to human health or safety as soon as possible, but no later than 48 hours, after discovery of the event. The report must include the information listed on the form contained in Section 14 of this permit. The Permittee may use this form to report excess emissions under this condition.

[18 AAC 50.235(a)(2) & 18 AAC 50.240(c), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

53. NSPS and NESHAP Reports. The Permittee shall submit to the Department copies of reports required by 40 CFR 60, New Source Performance Standards (NSPS), and 40 CFR Parts 61 and 63, National Emission Standards for Hazardous Air Pollutants (NESHAP), as they apply to the equipment in Table 1 as follows:

53.1 Attach a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 to the Operating Report required by Condition 54.

53.2 The Permittee shall notify the Department of any EPA granted waivers of NSPS or NESHAP emission standards, recordkeeping, monitoring, performance testing, or reporting requirements within 30 days after the Permittee receives a waiver.

[18 AAC 50.040, 1/18/97]
[40 CFR 60 & 63, 7/1/99]
[40 CFR 61, 12/19/96]

54. Operating Reports. During the life of this permit, the Permittee shall submit an original and two copies of all reports, certifications, notices, and test plans required by this permit with the operating report required by Exhibit D of Permit-to-Operate 9673-AA005. In addition, the report must include a listing of all deviations from the requirements of this permit that occurred during the reporting period. For each deviation, the report must identify

54.1 the date of the deviation;

54.2 the equipment involved;

54.3 the permit condition;

[9] 40 CFR 60.7(f) applies only to Turbines PU-0701 and PU-0801 and Heaters H-5302A & B.
[10] 40 CFR 60.48c(i) applies only to Heaters H-5302A & B

54.4 a description of the deviation; and

54.5 any corrective action or preventive measures taken and the date of such actions.

[18 AAC 50.320(a)(2), 1/18/97]

Section 11. Standard Conditions Not Otherwise Included in the Permit

55. Consistent with Alaska law, for purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in this permit, nothing in this permit precludes the use of any credible evidence or information relevant to whether the facility would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. This condition is not federally enforceable.

[18 AAC 50.320(a)(2), 7/2/00]
[40 CFR 52.12(c), 7/1/99]

56. The Permittee must comply with each permit term and condition. Noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, except for those requirements designated as not federally-enforceable, and is grounds for:

56.1 an enforcement action,

56.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or

56.3 denial of an operating-permit renewal application.

[18 AAC 50.345(a)(1), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

57. Consistent with Alaska Law, it is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.345(a)(2), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

58. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit.

[18 AAC 50.345(a)(3), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

59. Compliance with permit terms and conditions is considered to be compliance with those requirements that are:

59.1 included and specifically identified in the permit, or

59.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.345(a)(4), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

60. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any operating permit condition.

[18 AAC 50.345(a)(5), 1/18/97]

[18 aAC 50.320(a)(2), 7/2/00]

61. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.345(a)(6), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

62. The Permittee shall allow an officer or employee of the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:

62.1 enter upon the premises where a source subject to the operating permit is located or where records required by the permit are kept,

62.2 have access to and copy any records required by the permit,

62.3 inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit, and

62.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.345(a)(7), 1/18/97]
[18 AAC 50.320(a)(2), 7/2/00]

Section 12. Visible Emissions and Particulate Matter Monitoring Plan

Visible Emissions Observations

63. Except as provided in Conditions 64, the Permittee shall observe visible emissions in the exhaust of each source, except for flares and sources using only gaseous fuels using Method 9 within 6 months after the issue date of this permit , whichever is later, and at least once every 1,000 hours that a source operates on fuel oil thereafter, observe its exhaust for six minutes to obtain 24 individual 15-second readings in accordance with *Visible Emission Evaluation procedures* in Section 13 of this permit, and as follows:

63.1 If two or more individual 15-second readings during the six-minute observation period are greater than 20 percent opacity, then continue the Method 9 observations for an additional 12 minutes for a total of 18 minutes.

63.2 If four or more individual 15-second readings during the 18-minute observation period are greater than 20 percent opacity, then continue the Method 9 observations for an additional 42 minutes for a total of 60 minutes.

64. The Permittee may reduce the number of six minute observations required by Condition 63 to one observation for every 2,190 hours of source operation, if

64.1 sixty minutes of observations were not necessary under Condition 63.2; or

64.2 the source was observed for 60 minutes and no more than eight individual 15-second readings were greater than 20 percent opacity.

65. If a source is observed for 60 minutes and more than eight, but fewer than thirteen 15-second readings are greater than 20 percent opacity during the most recent observation, then the observation frequency under Condition 63 must be increased to or maintained at once every 1,000 hours of source operation.

66. Once each calendar year, the Permittee shall monitor the exhaust of the flare and all sources using gaseous fuels using Method 9 as set out in Condition 63.1 or 63.2.

67. The Permittee is not required to comply with Conditions 45, 46, and 47 (Test Plans, Test Notifications, and Test Reports) when the exhaust is observed for visible emissions under Conditions 63 through 66.

Particulate Matter Testing

68. Except for heaters, flares and sources using only gaseous fuels, the Permittee shall conduct tests to determine the concentration of particulate matter in the exhaust of a source as follows:

68.1 Except as provided in Condition 68.2, conduct a particulate matter (PM) source test according to the requirements set out in Section 9 no later than 90 calendar days after any time either of the following occurs, unless a follow-up Method 9 test during the 90 days shows that the following no longer occurs:

a. a 60-minute Method 9 evaluation results in 13 or more 15-second readings with an opacity greater than 20 percent, or

b. a 60-minute Method 9 evaluation results in an average opacity that is greater than 12 percent for a source with an exhaust stack diameter that is less than 21 inches.

68.2 The Permittee is exempt from the PM source test requirements in Condition 68.1 for an emission unit if a PM source test on that unit has shown compliance with the PM standard since permit issuance.

68.3 During each PM source test, observe exhaust for 60 minutes in accordance with Section 13 and submit a summary of these observations and the Method 9 readings with the final source test report. For each source with an exhaust stack diameter that is less than 21 inches and for each source subject to a New Source Performance Standard (NSPS) for opacity in 40 C.F.R. 60, calculate the average opacity and submit the calculations with source test report.

Reporting Requirements

69. The Permittee shall, within 180 calendar days after the effective date of this permit, record and report the exhaust stack diameter of each source: PU-0701, PU-0801, H-5701A & B, H-2001A & B, PU-0110A & B, and report this information to the Department with the first or second operating report required by Condition 54.

70. The Permittee shall keep a record of the operating hours for each source: PU-0701, PU-0801, H-5302A & B, H-4510A & B, H-5701A & B, H-2001A & B, PU-0110A & B, and the flare, and shall submit these records with the facility operating report required by Condition 54.

71. The Permittee shall submit a report in accordance with Condition 52

71.1 if any sixty minute Method 9 evaluation conducted under Condition 63.2 results in an exceedance ot the limit in Condition 5 (thirteen or more 15-second reading greater than 20 percent opacity); and

71.2 if any PM test conducted under Condition 68.1 results an exceedance of the limit in Condition 6 (0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours).

72. Include with the facility operating report required by Condition 54 copies of all Method 9 observations for equipment subject to this permit.

[18 AAC 50.320(a)(2), 7/2/00]

Section 13. Visible Emission Evaluation Procedures

An observer qualified according to 40 CFR 60, RM 9 (Method 9) shall use the following procedures to determine the reduction of visibility through the exhaust effluent.

Position. The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction and, when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

Field Records. The observer shall record the name of the plant, emission location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet . The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on the sheet at the time opacity readings are initiated and completed.

Observations. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume but instead shall observe the plume momentarily at 15-second intervals. Unless directed to do otherwise in this permit, observe emissions for 60 consecutive minutes to obtain a minimum of 240 observations.

Attached Steam Plumes. When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

Detached Steam Plume. When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

Recording Observations. Opacity observations shall be recorded to the nearest five percent at 15-second intervals on the Visible Emissions Observation Record contained in this section. Record the minimum number of observations required by the permit. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

Data Reduction. To determine compliance with a standard set out in Condition 5 of this permit, count the number of observations that exceed 20 percent opacity and record this number on the sheet.

To determine the six minute average opacity set out in Condition 68.1b of this permit, divide the observations recorded on the record sheet into sets of 24 consecutive observations. Sets need not be consecutive in time and in no case shall two sets overlap. For each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24. If an applicable standard specifies an averaging time requiring more than 24 observations, calculate the average for all observations made during the specified time period. Record the average opacity on the sheet.

Visible Emissions Field Data Sheet

Certified Observer:______________________

Company: ______________________

Location: ______________________

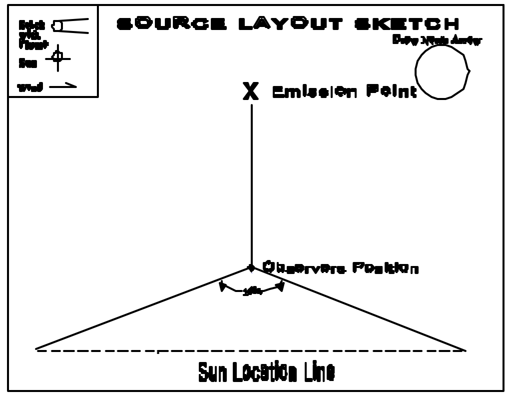
Test No.: __________ Date: __________

Source: ______________________

Production Rate, Operating Rate & Unit Operating Hours: ______________________

Hrs. of observation: __________

Fuel Type: __________



Clock Time	Initial				Final
Observer location Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description: Color					
Distance visible					
Water droplet plume? (attached or detached?)					
Other information					

Visible Emissions Observation Record

Page ___ of ___

Company _________________ Certified Observer____________________

Test Number ___________________________ Clock time__________________

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

Additional information:

____
Observer Signature

Data Reduction:
Duration of Observation Period (minutes) ________________
Number of Observations _________________
Number of Observations exceeding 20% __________________

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 14. ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

BP Exploration (Alaska), Inc. ______________________________
Company Name

Milne Point Production Facility ______
Facility Name

1. Reason for notification:

❑ **Excess Emission** ❑ **Permit Condition Deviation**

2. Event Information (Use 24-hour clock)**:**

	START Time**:** (hr:min):	**END** Time:	**Duration**
Date: ________	__________:__________	__________:__________	__________:______
Date: ________	__________:__________	__________:__________	__________:______
		Total:	__________:______

3. Cause of Event (Check all that apply)**:**

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

4. Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
____________	__________________	_________________________________	______________
____________	__________________	_________________________________	______________

5. Emission Limit Exceeded and/or Permit Condition Deviation:

Identify each Emission Standard and Permit Condition potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Permit Condition		Limit	Exceedance
____________	__________________	_________________________________	______________

6. Emission/Deviation Reduction:

Attach a description of the measures taken to minimize and/or control emissions or permit condition deviations during the event.

7. Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: Signature: Date:

Section 15. Permit Documentation

March 16, 1984	PSD Permit Application, Conoco, Inc. - Milne Point Project.
July 9, 1984	Letter pertaining to PSD Application, Conoco, Inc.
September 13, 1984	Letter pertaining to PSD Application, Conoco, Inc.
October 9, 1984	Letter pertaining to PSD Application, Conoco, Inc.
January 24, 1985	Technical Analysis for Prevention of Significant Deterioration, Conoco – Milne Point, Alaska.
April 26, 1985	Air Quality Control Permit-to-Operate No. 8536-AA008.
August 15, 1986	Letter from Conoco to ADEC "Request for 20% Opacity Limitation for Milne Point Flare."
September 3, 1986	Air Quality Control Permit-to-Operate No. 8636-AA014.
December 5, 1986	Letter from Conoco to ADEC/NRO transmitting the report of source tests conducted at Milne Point on September 10-12, 1986.
January 26, 1987	Letter from ADEC/NRO to Conoco accepting source test and fuel gas analysis results.
February 25, 1987	Letter from Conoco to EPA requesting approval of Drager tube analysis for biannual fuel gas sulfur analysis, and for one sulfur and nitrogen test of liquid fuel as long as fuel source not changes, to meet requirements of 40 CFR 60.334.
April 4, 1988	Letter from Conoco to ADEC/NRO requesting renewal of Air Quality Control Permit-to Operate 8636-AA014.
April 20, 1988	Air Quality Permit-to-Operate No. 8836-AA002.
January 18, 1990	Letter from EPA to Conoco approving Drager tube analysis for fuel gas, as requested in February 25, 1987 letter, as long as H_2S less than 50 ppm.
February 17, 1993	Letter from Conoco to ADEC/PCRO requesting renewal of Air Quality Control Permit-to-Operate 8836-AA002.
March 2, 1993	Letter from ADEC to Conoco requesting additional information about the permitted equipment.
March 8, 1993	Letter from Conoco to ADEC/PCRO responding to ADEC's March 2, 1993 information request.
March 30, 1993	Letter from ADEC to Conoco requesting additional information about the permitted equipment.
April 21, 1993	Letter from Conoco to ADEC/PCRO responding to ADEC's March 30, 1993 information request.

July 30, 1993	Letter from ADEC to Conoco presenting a draft renewal of Permit to Operate 8836-AA002.
September 9, 1993	Letter from Conoco to ADEC/PCRO presenting comments to the draft permit renewal.
January 5, 1994	Letter from BP to ADEC/PCRO requesting transfer of Air Quality Control Permit-to-Operate No. 8836-AA002 from Conoco to BP effective January 1, 1994.
January 10, 1994	Letter from ADEC to BP approving the transfer of Air Quality Control Permit-to-Operate No. 8836-AA002 from Conoco to BP effective January 1, 1994.
February 10, 1994	Letter from BP to ADEC/PCRO identifying errors in Air Quality Control Permit-to-Operate No. 8836-AA002 and presenting emission calculation for permitted equipment.
October 31, 1994	Letter from BP to ADEC commenting on draft permit.
November 30, 1994	Facsimile from BP to ADEC commenting on draft permit.
November 30, 1994	Air Quality Control Permit-to-Operate No. 9473-AA010.
November 30, 1994	Letter from BP to ADEC requesting modifications to Air Quality Control Permit No. 9473-AA007 to allow installation of additional equipment.
December 9, 1994	Letter from BP requesting administrative corrections to Air Quality Permit No. 9473-AA007.
December 12, 1994	Telephone conversation between Alison Cooke (BP) and Jim Greaves (ADEC) asking that ADEC suspend review of the permit amendment application dated November 30, 1994 due to possible errors in the equipment estimates.
December 27, 1994	Air Quality Control Permit-to-Operate No. 9473-AA035.
January 19, 1995	Letter from BP requesting modifications to Air Quality Permit No. 9473-AA007 to allow for installation of additional equipment.
February 13, 1995	Letter from BPXA and follow-up telephone conversation Jim Greaves (ADEC), Alison Cooke (BPXA), and Chuck Stewart on February 14, 1995, in which BP requested to modify their January 19, 1995 amendment application to Air Quality Permit No. 9473-AA007 to allow temporary use of one heater at E-pad while other heaters are being rebuilt.
February 22, 1995	Letter from BP providing emission estimates for their proposal to allow temporary use of one heater at E-pad while other heaters are being rebuilt.
July 28, 1995	Letter from BP requesting ADEC approval of disaggregation of distant well pad and equipment modifications and installations. The disaggregated sources are located at C-pad and the Pipeline Tie-in Module.

August 15, 1995	Letter from ADEC to BP granting approval of disaggregation of sources and minor modifications at the facility.
August 22, 1995	Letter from ADEC to BP granting approval and re-determination of original PSD fuel consumption limit allowances for diesel fuel use by two dual fuel turbines at the facility.
October 2, 1995	Letter from ADEC to BP granting approval of proposed BP corrections and changes to the tabulation of emission sources attributable to PSD avoidance agreements shown in Exhibit B.
April 26, 1996	Letter from BP formally requesting ADEC to make a permit determination regarding the enforceability of the air emission limitations for two GE LM 2500 dual fuel turbines.
May 29, 1996	Letter from ADEC to BP reaffirming original PSD TAR BACT limits for NO_X for the two GE LM 2500 duel fuel turbines.
July 25, 1996	Letter from BP to ADEC requesting a permit amendment that revises the BACT emission rate for NO_X, as well as the annual limit on total NO_X emissions for the two GE LM 2500 dual fuel turbines.
August 19, 1996	Letter from Anita Frankel (EPA) to Stephen Taylor (BP) authorizing a waiver from monitoring fuel-bound nitrogen for North Slope facilities, including MPU.
August 30, 1996	Letter from BP to ADEC requesting an additional change to the original Phase I permit amendment request.
September 4, 1996	Letter from ADEC to BP granting approval of permit amendment changes sought by BP on July 25, 1996 and August 30, 1996.
January 17, 1997	Air Quality Control Permit to Operate No. 9673-AA005.
December 2, 1997	BP Exploration Title V Permit Application, Milne Point Production Facility, prepared by SECOR International Incorporated, November 1997.
November 5, 1999	Revised Construction Permit Request – Phase II, For Milne Point Unit, North Slope, Alaska Prepared for BP Exploration (Alaska) Inc., by Hoefler Consulting Group, Julie H. Ackerlund, and Radian International, Revised: November 1999.
November 8, 1999	Letter of Transmittal Milne Point Unit PSD Amendment Modeling Files on compact disc.
January 5, 2000	Letter from Sally Ryan (ADEC) to Ray Vaseleski (BPXA) Re: BPXA Application for Milne Point Unit submitted November 1999 is incomplete.
March 10, 2000	Response to ADEC Incompleteness Letter dated January 5, 2000, for the Milne Point Revised Construction Permit Request – Phase II, North Slope, Alaska, prepared for BP Exploration (Alaska) Inc., by Hoefler Consulting Group.

March, 2000	Milne Point - Modeling Completeness Issues March 2000 Submittal, document prepared by Alan Schuler (ADEC).
April 17, 2000	Fax Transmittal from Steve Sommers (BPXA) to Sally Ryan (ADEC) on cost/ton of 0.225% sulfur diesel.
May 1, 2000	Email from Steve Barnard (BPXA) to Alan Schuler (ADEC), modeling files.
May 2, 2000	Fax Transmittal from John Booth (BPXA) to Sally Ryan (ADEC), re: E-pad heater vendor data, and Section X, Insignificant Sources from the Title V Permit Application.
May 3, 2000	Letter from Ross Klie, (BPXA) to Jim Baumgartner (ADEC) Subject: Milne Point Unit Response to March 30, 2000 Emailed Modeling Comments.
May 17, 2000	Fax Transmittal from John Booth (BPXA) to Sally Ryan (ADEC) on Milne Point H-5302 vendor information.
June 12, 2000	Letter from Ross Klie (BPXA) to Jim Baumgartner (ADEC) Subject: Milne Point Updated PSD Applicability Analysis.
June 14, 2000	Memorandum written by Alan Schuler (ADEC) Subject: Review of Milne Point Unit Modeling Analysis.
June 22, 2000	Memorandum written by Sally Ryan (ADEC) Subject: Review of Milne Point Unit BACT Analysis.
June 23, 2000	Letter from Sally Ryan (ADEC) to Ray Vaseleski (BPXA), Application is complete.
July 25, 2000	Memorandum written by Sally Ryan (ADEC) Subject: BP BACT Revisions.
October 31, 2000	Public Comment Draft, Air Quality Construction Permit Number 0073-AC023, prepared by the Department
December 6, 2000	Comments on Air Quality Construction Permit Number 0073-AC023, submitted to the Department by George R. Snodgrass, BPXA.
December 12, 2001	Ex Parte Meeting Notes prepared by Sally Ryan (ADEC).
February 3, 2001	Ex Parte Email from Sally Ryan (ADEC) to Jim Pfeiffer (BPXA) and Al Trbovich (Hoefler) summarizing outstanding deliverables.
April 20, 2001	Ex Parte Letter from George R. Snodgrass, (BPXA) to Jim Baumgartner (ADEC) re: Response to February 3, 2001 ADEC email.
April 20, 2001	Ex Parte Letter from Jim Pfeiffer (BPXA) to Jim Baumgartner (ADEC) re: vendor emission guarantees for H-5701.